

REMARKS

The Non-Final Office Action, mailed March 19, 2009, considered claims 1-20. Claims 6 and 14 were objected to because of informalities. Claim 11 was rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as then invention. Claims 6-10 were rejected under 35 U.S.C. 101 because the claimed invention was directed to non-statutory subject matter. Claims 1-3, 5-8, 10, 14-16 were rejected under 35 U.S.C. 103(a) as being unpatentable over *Gazdik et al.* (US 6,301,708) hereinafter *Gazdik* in view of *Lee, Kyu-Woong et al.*, (US 2004/0031029) hereinafter *Lee*. Claims 4, 9, 11-13, 17-20 were rejected under 35 U.S.C. 103(a) as being unpatentable over *Gazdik* in view of *Lee*, and further in view of *Colvin* (US 6,799,277) hereinafter *Colvin*.¹

By this amendment, claims 1-2, 4-7 and 9-20 are amended and claims 21-22 are new.²

Claims 3 and 8 are canceled. Accordingly, claims 1-2, 4-7, and 9-22 are pending, of which claims 1, 6, and 11 are the independent claims at issue.

Initially, claims 6 and 14 were objected to because of informalities. By this amendment, the informalities have been corrected as per the Examiner's suggestions, and Applicant respectfully requests that the objections to claims 6 and 14, for informalities, be withdrawn. Furthermore, claim 11 was rejected as being indefinite for lack of antecedent basis. By this amendment, the limitation "the client computer" has been changed to recite "the client computing device," which has proper antecedent basis from the preamble, which recites "At a client computing device." Accordingly, Applicant respectfully requests that the rejection of claim 11, as being indefinite, be withdrawn. Finally, claims 6-10 were rejected for being directed to non-statutory subject matter. Claim 6 and the specification have been amended to recite "a computer-readable storage medium," and claims 7 and 9-10 inherit this limitation from claim 6. Claim 8 has been canceled. Accordingly, Applicant respectfully requests that the rejection of claims 6-7 and 9-10, as being directed to non-statutory subject matter, be withdrawn.

The invention is generally directed to controlling installation update behaviors on a client computing device. For example, claim 1 recites a computer implemented method for modifying the

¹ Although the prior art status of the cited art is not being challenged at this time, Applicant reserves the right to challenge the prior art status of the cited art at any appropriate time, should it arise. Accordingly, any arguments and amendments made herein should not be construed as acquiescing to any prior art status of the cited art.

² Support for the amendments to the claims are found throughout the specification and previously presented claims, including but not limited to paragraphs [0032], [0036], [0067], [0072], [0075] and [0115]-[0120] and Figures 1 and 14.

normal installation behavior of a client computing device during a software update installation. Claim 1 defines obtaining software update information to be installed on the client computing device. The software update information comprises a software update, a rule for applicability of the software update, and an installation attribute. The software update comprises at least one update to at least one software product previously installed on the client computing device. The rule for applicability defines one or more conditions at the client computing device. The installation attribute indicates that normal installation behavior at the client computing device is to be modified for installation of the software update. The modified installation behavior indicates a modification to one of the normal user-interface behavior and the normal download behavior used when installing a standard update.

Claim 1 also defines determining that the software update is applicable to the client computing device by determining that the one or more conditions defined by the rule for applicability are met. In addition, claim 1 defines determining that the installation attribute indicates that normal installation behavior at the client computing device is to be modified for installation of the software update.

In response to these determinations, claim 1 defines modifying the normal installation behavior at the client computing device according to the installation attribute. This modification includes modifying at least one of the normal user-interface behavior and normal download behavior used when installing a standard update. When modifying the normal download behavior, the method modifies the normal download behavior to permit the download process downloading the software update to compete with other network activities on a current connection at the client computing device so that as much network bandwidth as possible is used when downloading the software update's content so as to download the software update more quickly over the current connection at the client computing device. Finally, claim 1 defines installing the software update on the client computing device according to the modified installation behavior.

Claim 6 is a computer program product claim corresponding to the method of claim 1.

Claim 11 recites a computer implemented method similar to that defined by claim 1, but which further defines several installation attributes and modified installation behavior in accordance with these attributes.

The Office Action rejects claims 1-2, 5-7, 10 and 14-16 under §103(a) as being unpatentable over *Gazdik* in view of *Lee*. Applicants respectfully submit that the cited art of record does not anticipate or otherwise render the amended claims unpatentable for at least the reason that that cited art does not disclose, suggest, or enable each and every element of these claims.

Gazdik describes a method for installing/uninstalling software. *Gazdik* fragments the installation/uninstallation process into unique component-specific data files. (col. 3, ll. 29-36). Then, the flow of the installation/uninstallation process is controlled by a process-control file which is read and executed by an install/uninstall processing engine. (col. 3, ll. 40-44). In this way, the logic required to install/uninstall a specific software component is separated from the overall install/uninstall process. (col. 3, ll. 44-49). However, *Gazdik* is silent with respect to several aspects of claim 1. For example, *Gazdik* fails to teach or suggest *"modifying the normal download behavior . . . to permit the download process downloading the software update to compete with other network activities on a current connection at the client computing device so that as much network bandwidth as possible is used when downloading the software update's content so as to download the software update more quickly over the current connection at the client computing device."* Instead, *Gazdik* merely makes reference to minimizing the amount of information that must be downloaded from a remote server. (col. 4, ll. 40-58). Furthermore, *Gazdik* fails to teach or suggest *"determining that the installation attribute indicates that normal installation behavior at the client computing device is to be modified for installation of the software update"* and *"modify[ing] at least one . . . normal user-interface behavior,"* among other things. Finally, *Gazdik* has little to do with updating already installed software, but is primarily directed to scripting software installation/uninstallation.

The other cited art fails to remedy the deficiencies of *Gazdik*. For example, *Lee* describes a method for automatically updating software components disposed on various networked computing devices. An administrator console is provided, giving administrators information about the update needs of the software components in different networked devices. ([0020]). The administrator console also includes functionality for update scheduling. ([0021]-[0022]). A local update agent obtains update files and performs the installation of updates as required. ([0023]). The teachings of *Lee* generally deal with network administration instead of end-user updates. Accordingly, *Lee* fails to teach or suggest many aspects of a client computing system, such as, for example, the modification of the normal download behavior, especially with regards to using as much network bandwidth as possible over the current connection at the client computing device. Instead, *Lee* focuses on distributed bandwidth and processing. (see, for example, [0028]). Furthermore, *Lee* also fails to teach or suggest modifying a normal installation behavior in response to an installation attribute, or any aspect of a client computing device user-interface.

According, the cited art fails to teach or suggest, either singly or in combination:

"obtaining software update information to be installed on the client computing device, the software update information comprising:

a software update, the software update comprising at least one update to at least one software product previously installed on the client computing device;

a rule for applicability of the software update, the rule for applicability defining one or more conditions at the client computing device; and

an installation attribute, the installation attribute indicating that normal installation behavior at the client computing device is to be modified for installation of the software update, the modified installation behavior indicating a modification to one of the normal user-interface behavior and the normal download behavior used when installing a standard update; and

determining that the software update is applicable to the client computing device based on determining that the one or more conditions defined by the rule for applicability are met;

determining that the installation attribute indicates that normal installation behavior at the client computing device is to be modified for installation of the software update; and

in response to the determination that the software update is applicable to the client computing device and that the installation attribute indicates that normal installation behavior at the client computing device is to be modified:

modifying the normal installation behavior at the client computing device according to the installation attribute to modify at least one of the normal user-interface behavior and normal download behavior used when installing a standard update, wherein modifying the normal download behavior comprises modifying the normal download behavior to permit the download process downloading the software update to compete with other network activities on a current connection at the client computing device so that as much network bandwidth as possible is used when downloading the software update's content so as to download the software update more quickly over the current connection at the client computing device; and

installing the software update on the client computing device according to the modified installation behavior."

as recited in claims 1 and 6, and in combination with the other limitations of claims 1 and 6. For at least this reason, claims 1 and 6 patentably define over the art of record. For at least this same reason, claims 2, 4-5, 7, 9-10, and 12-16 also patentably define over the art of record.

Many of the dependent claims also independently distinguish over the art of record. For example, *Lee* was cited for the teachings of dependent claim 14. However, Applicants respectfully submit that *Lee* fails to teach or suggest the limitations of claim 14 for at least the reason that *Lee* fails to teach or suggest second tier updates dependent on base updates and an indicator that an update is a leaf update. Accordingly, *Lee* fails to teach or suggest "*a base set of one or more base updates*" and "*a second set of one or more second tier updates, wherein proper installation of the second tier updates depends on a prior installation of the base updates,*" and further "*an indicator of whether or not the second tier update is a leaf update, wherein a leaf update has no other updates dependent on a prior installation of the leaf update,*" as recited by claim 14.

The Office Action rejects claims 4, 9, 11-13 and 17-20 under §103(a) as being unpatentable over *Gazdik* in view of *Lee*, and further in view of *Colvin*. Applicants respectfully submit that the cited art of record does not anticipate or otherwise render the amended claims unpatentable for at least the reason that that cited art does not disclose, suggest, or enable each and every element of these claims.

Colvin defines methods for monitoring, testing, distributing, and using computer software. Aspects include exchanging information with a software user; monitoring software use; monitoring, metering or auditing networked computers; improving software quality assurance; and collecting operational data. (col. 2, ll. 39-62). However, *Colvin* fails to remedy the deficiencies of *Gazdik* and *Lee* with respect to independent claim 11. Furthermore, *Colvin* fails to teach or suggest many new aspects introduced by claim 11, such as, for example, "*a mandatory installation attribute indicating that the software update must be installed by the user,*" "*a deadline installation attribute indicating that the software update must be installed by a corresponding deadline,*" or "*a zero service interruption (ZSI) installation attribute indicating that the software update may be installed without any system interruption of the client computing device, wherein a system interruption includes rebooting the client computing device, terminating a software application at the client computing device, and requiring user interaction at the client computing device.*"

According, the cited art fails to teach or suggest, either singly or in combination:

"obtaining software update information to be installed on the client computing device, the software update information comprising:

a software update, the software update comprising at least one update to at least one software product previously installed on the client computing device;

a rule for the applicability of the software update, the rule for applicability defining one or more conditions at the client computing device; and

an installation attribute operable for controlling the installation of the software update;

determining whether the installation attribute is a mandatory installation attribute indicating that the software update must be installed by the user, and if so, requiring the software update to be installed and modifying the standard user-interface behavior of the client computing device to provide a visual indication in the user-interface that the user is unable to unselect installation of the software update;

determining whether the installation attribute is a priority installation attribute, and if so, modifying the standard download behavior to permit the download process downloading the software update to compete with other network activities on a current connection at the client computing device so that as much network bandwidth as possible is used when downloading the software update's content so as to download the software update more quickly over the current connection at the client computing device;

determining whether the installation attribute is a deadline installation attribute indicating that the software update must be installed by a corresponding deadline, and if so, determining whether the corresponding deadline of the deadline attribute has expired, and if so, requiring the software update to be installed and modifying the standard user-interface behavior of the client computing device to provide a visual indication in the user-interface that the user is unable to unselect installation of the software update;

determining whether the installation attribute is a zero service interruption (ZSI) installation attribute indicating that the software update may be installed without any system interruption of the client computing device, wherein a system interruption includes rebooting the client computing device, terminating a software application at the client computing device, and requiring user interaction at the client computing device, and if so, modifying the normal installation behavior of the client computing device with respect to the software update such

that the software update will be automatically installed on the client computing device without any system interruption if the client computing device is properly configured; and
installing the update on the client computing device according to the modified
installation behavior."

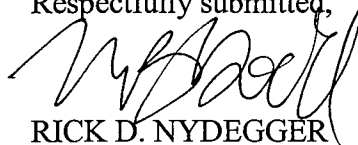
as recited in claim 11, and in combination with the other limitations of claim 11. For at least this reason, claim 11 patentably defines over the art of record. For at least this same reason, claims 17-20 also patentably define over the art of record. However, many of the dependent claims also independently distinguish over the art of record. For example, dependent claim 19 independently distinguishes over the art of record for at least the same reason as dependent claim 14, as discussed above.

In view of the foregoing, Applicant respectfully submits that all the rejections to the independent claims are now moot and that the independent claims are now allowable over the cited art, such that any of the remaining rejections and assertions made, particularly with respect to all of the dependent claims, do not need to be addressed individually at this time. It will be appreciated, however, that this should not be construed as Applicant acquiescing to any of the purported teachings or assertions made in the last action regarding the cited art or the pending application, including any official notice, and particularly with regard to the dependent claims.

In the event that the Examiner finds remaining impediment to a prompt allowance of this application that may be clarified through a telephone interview, the Examiner is requested to contact the undersigned attorney at 801-533-9800.

Dated this 14th day of July, 2009.

Respectfully submitted,



RICK D. NYDEGGER
Registration No. 28,651
MICHAEL B. DODD
Registration No. 46,437
Attorneys for Applicant
Customer No. 47973